

WHAT IS CLAIMED:

1. A method comprising:
 - receiving a digital message from a communication source coupled to a network;
 - selecting a multicast address from a plurality of addresses based on a communication group identification number received from the communication source, the communication group identification number including two or more members;
 - communicating a routing signal based on the selected multicast address to selected elements of the network; and
 - distributing the digital message to the members using the selected elements based on the routing signal.
2. The method of claim 1 wherein receiving a digital message includes receiving a digital message from a two way radio.
3. The method of claim 1 wherein receiving a digital message includes receiving a digital message from a computer coupled to an audio transducer.
4. The method of claim 1 wherein selecting a multicast address includes mathematically mapping the communication group identification number to the multicast address.
5. The method of claim 1 wherein selecting a multicast address from a plurality of addresses based on a communication group identification number received from the communication source includes selecting a multicast address from a plurality of addresses based on a network access code (NAC) number received from the communication source.

6. The method of claim 1 wherein selecting a multicast address from a plurality of addresses based on a communication group identification number received from the communication source includes selecting a multicast address from a plurality of addresses based on a system identification number received from the communication source.

7. The method of claim 1 wherein selecting a multicast address from a plurality of addresses based on a communication group identification number received from the communication source includes selecting a multicast address from a plurality of addresses based on a telephone number received from the communication source.

8. The method of claim 1 wherein selecting a multicast address includes accessing a registry of members.

9. The method of claim 8 wherein accessing a registry of members includes accessing a registry of talk groups.

10. The method of claim 8 wherein accessing a registry of members includes accessing a registry of network access codes (NACs).

11. The method of claim 8 accessing a registry of members includes accessing a registry of sites, home channels and group numbers.

12. The method of claim 8 accessing a registry of members includes accessing a registry of unit identifiers corresponding to subscribers.

13. The method of claim 8 accessing a registry of members includes accessing a registry of call guards of a communication system.

14. The method of claim 1 further including receiving a request from a communication receiver to register with the selected multicast address.
15. The method of claim 1 wherein distributing the digital message includes encoding using real time transport protocol (RTP).
16. The method of claim 1 wherein distributing the digital message includes encoding one or more voice packets in an RTP frame.
17. The method of claim 1 wherein distributing the digital message includes distributing a packet using Internet protocol (IP).
18. The method of claim 1 further including distributing control messaging.
19. The method of claim 18 wherein distributing control messaging includes distributing real time control protocol (RTCP).
20. The method of claim 18 wherein distributing control messaging includes using simple object access protocol (SOAP).
21. The method of claim 18 wherein distributing control messaging includes using extensible markup language (XML).
22. A computer readable medium having instructions stored thereon for causing a computer to execute a method comprising:
- receiving a message and a communication group identification number from a land mobile radio;
 - mapping the communication group identification number to a multicast address; and

distributing the message based on the multicast address.

23. The computer readable memory of claim 22 further comprising instructions for receiving a communication group registration request from a receiving station.

24. The computer readable memory of claim 22 further comprising instructions for processing a real time transport protocol (RTP) packet.

25. A system comprising:
a plurality of transceivers;
a plurality of routers wherein each transceiver is coupled to at least one router of the plurality of routers;
a digital communication network coupled to the plurality of routers; and
one or more computers coupled to the digital communication network
wherein the one or more computers are adapted to distribute a control packet to a subset of the plurality of routers based on a multicast address selected as a function of a group identification number received from the plurality of transceivers.

26. The system of claim 25 wherein a transceiver of the plurality of transceivers includes a computer console.

27. The system of claim 25 wherein a transceiver of the plurality of transceivers includes a telephony gateway.

28. The system of claim 25 wherein the digital communication network includes a private network.

29. The system of claim 25 wherein the digital communication network includes an Ethernet network.

30. The system of claim 25 wherein the digital communication network includes the Internet.
31. The system of claim 25 wherein a router of the plurality of routers includes a look up table.
32. A method comprising:
 - receiving a message from a caller on a network, the message including a group identification code;
 - receiving a registration request from one or more receivers on the network;
 - mapping the group identification code to a multicast address;
 - transmitting a signal to a plurality of stations on the network, the plurality of stations selected as a function of the multicast address, the signal adapted to configure the network to direct the message to the one or more receivers.
33. The method of claim 32 wherein mapping includes accessing a table.
34. The method of claim 32 wherein mapping includes dynamically establishing a virtual circuit.
35. The method of claim 32 wherein receiving a message includes receiving a packet of digital data encoded in an Internet protocol (IP).
36. A system comprising:
 - a plurality of communication devices;
 - a plurality of routers wherein each communication device is coupled to at least one router of the plurality of routers;
 - a digital communication network coupled to the plurality of routers; and

means for mapping a communication identification number to a multicast address wherein a packet communicated to the multicast address is distributed by the digital communication network and the plurality of routers to a subset of the plurality of communication devices.

37. The system of claim 36 wherein the means for mapping includes a look up table.

38. The system of claim 36 wherein the means for mapping includes a processor adapted for dynamic mapping.

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